

PATENT

Claim Amendments:

Please amend the claims as indicated:

1-26. (CANCELED)

26. (AMENDED) A method for eliminating redundant sequences that are common between two samples, the method comprising of the steps:

isolating RNA strands from a first sample;

isolating RNA strands from a second sample;

generating cDNA strands from the RNA strands from the first sample;

mixing the cDNA strands of the first sample with the RNA strands from the second sample;

hybridizing the cDNA strands and RNA strands with common sequences ~~hybridizing~~ to form cDNA/RNA compliments, the cDNA strands and the RNA strands without common sequences remaining unhybridized cDNA strands and unhybridized RNA strands; and

degrading the cDNA/RNA compliments to leave the unhybridized cDNA strands and the unhybridized RNA strands.

27. (AMENDED) The method of Claim 26, wherein the step of generating cDNA strands ~~for~~ from the RNA strands from the first sample comprises performing RT-PCR.

28. (CANCELLED)

29. (PREVIOUSLY PRESENTED) The method of Claim 26, wherein the first sample is a healthy tissue and the second sample is a diseased tissue.

30. (PREVIOUSLY PRESENTED) The method of Claim 26, wherein the first sample is a diseased tissue and the second sample is a healthy tissue.

31. (PREVIOUSLY PRESENTED) The method of Claim 26, further comprising:
amplifying the unhybridized cDNA strands using PCR.

32. (AMENDED) The method of Claim 26, further comprising:
producing a second set of cDNA strands from the unhybridized RNA strands.
33. (PREVIOUSLY PRESENTED) The method of Claim 32, further comprising:
amplifying the second set of cDNA strands using PCR.
34. (PREVIOUSLY PRESENTED) The method of Claim 26, wherein the step of degrading compliments is performed with an Exonuclease III enzyme.
35. (AMENDED) The method of Claim 26, wherein the step of degrading compliments is performed with an Exonuclease IV ~~IV~~ VII enzyme.
36. (AMENDED) The method of Claim 26, further comprising:
displaying at least one of the unhybridized cDNAs strands ~~or and the unhybridized RNAs strands.~~
37. (PREVIOUSLY PRESENTED) The method of Claim 36, wherein the step of displaying comprises using electrophoresis.
38. (AMENDED) The method of Claim 26, further comprising:
reading at least one of the unhybridized cDNA strands ~~or and the unhybrized RNA strands with a photographic plate~~ an autoradiogram.
39. (AMENDED) The method of Claim 26, wherein the first and second samples are selected from a the group ~~comprising~~ consisting of cells, tissues, pathogens, plants, and animals.
40. (AMENDED) The method of Claim 26, wherein the first and second sample are differentiated due to a diseased state, developmental, change, or induced by an external or internal stimulus.

41. (AMENDED) A method for determining differences between a first sample of cDNA strands and a second sample of RNA strands, the method comprising of the steps:

mixing the first sample of cDNA strands with the second sample of RNA strands; ;
hybridizing the cDNA strands and the RNA strands with common sequences hybridizing
to form cDNA/RNA compliments, the cDNA strands and the RNA strands without
common sequences remaning unhybridized cDNA strands and unhybridized RNA
strands; and
degrading the cDNA/RNA compliments to leave the unhybridized cDNA strands and the
unhybridized RNA strands; and
analyzing at least one of the unhybridized cDNA strands and the unhybridized RNA
strands to determine differences between the first sample and the second sample.

42. (CANCELLED)

43. (AMENDED) The method of Claim 41, further comprising:
amplifying the unhybridized cDNA strands using PCR.

44. (AMENDED) The method of Claim 41, further comprising:
producing a further set of cDNA strands from the unhybridized RNA strands.

45. (PREVIOUSLY PRESENTED) The method of Claim 44, further comprising:
amplifying the further set of cDNA strands using PCR.

46. (PREVIOUSLY PRESENTED) The method of Claim 41, wherein the step of degrading compliments is performed with an Exonuclease III enzyme.

47. (AMENDED) The method of Claim 41, wherein the step of degrading compliments is performed with an Exonuclease IV VII enzyme.